

REMARKS

Claims 1-22, 38-62, and 68-91, as amended, remain in the present application for the Examiner's review and consideration. Claims 23-37 were previously withdrawn from consideration with the present application as being directed to an unelected species, and claims 78-84 previously added are now marked as withdrawn as being directed to an unelected species. Method claims 63-67 directed to a non-elected embodiment were previously canceled. Claims 92-98 are added to claim the invention more clearly.

Claims 1, 6-8, 10, 14, 19, 20, 22, 38, 39, 44, 45, 51, 52, 62, 71, 76-80, 85, 86 and 89 are rejected under 35 U.S.C. §102 (b) as being anticipated by U.S. patent no. 1,817,184 to Fuchs *et al.* Claims 1, 46, 47, 62 and 76-79 are rejected under 35 U.S.C. §102 (b) as being anticipated by U.S. patent no. 3,444,035 to Bushnell. Among these rejected claims, claims 1 and 62 are the independent claims.

Claims 2-5, 9, 11-13, 15-18, 21, 40-42, 53-59, 68-70, 72-75, 81-84, 87, 88, 90 and 91 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuchs in view of U.S. Patent Application Publication No. 2003/0232170 to Gillette *et al.* ("Gillette").

Claims 43 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuchs in view of U.S. Patent No. 5,652,041 to Makansi.

Claims 48-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuchs in view of U.S. Patent No. 3,924,040 to Addie *et al.*

Claims 60-61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuchs in view of Gillette and further in view of U.S. Patent No. 4,442,161 to Kirayoglu *et al.*

While Applicant is submitting herewith an RCE to continue the prosecution of this case, Applicant also respectfully traverse the finality of the pending office action. Applicant has diligently prosecuted this application, and has been able to overcome all the prior rejections. *See* MPEP 706.07 ("The applicant who is seeking to define his or her invention in claims that will give him or her the patent protection to which he or she is justly entitled should receive the cooperation the examiner to that end.") This Rule does not prevent the issuance of final office actions when the applicant "dallies in the prosecution." *Id.* As the prosecution record clearly shows, Applicant has put forth robust arguments and has conducted multiple interviews with the Examiner in order to complete the prosecution. Two RCEs have already been filed in this case. The current office action asserts prior art references that are previously unknown to the Applicant. Applicant respectfully

requests that future office actions, if necessary, be made non-final in accordance to MPEP 706.07.

Independent claim 1 is being rejected as being anticipated by Fuchs and Bushnell.

To bring the long prosecution of this case to a successful end Applicant has amended claim 1 to include the limitation of the original claim 2, *i.e.*, wherein a combined density of the fibrous outer layer and the adhesive layer in the depressed areas is at least about 0.7 g/cm^3 . While the Examiner rejects claim 2 over a combination of Fuchs and Gillette, stating that Gillette discloses this combined density, Gillette actually does not. Gillette discloses the density of only the spunlaced fabric in paragraph [0017] and claim 9, and the density of the backing layer film in paragraphs [0025] and [0028] and claim 37. Furthermore, the claimed “combined density” cannot be ascertained merely from the densities of the starting materials, *i.e.*, fabric and film, because density is a function of volume and the embossing step greatly changes the thickness of the depressed areas and their thickness has to be measured before the combined density can be determined. Furthermore, the thickness after the embossing step also depends on the pressure and temperature used as well as the time duration that the pressure and temperature regime is applied to the starting materials, which are not disclosed in Gillette. For this reason alone, claim 1 is patentable over Fuchs and the combination of Fuchs and Gillette.

Claim 1 has also been amended to recite that “the elevation of the elevated area, D, is greater than the thickness of fibrous layer, T_f , in the elevated area,” which is the subject of original dependent claim 18. In paragraph 4.a of the Office Action, the Examiner rejects claim 18 based on the same combination of Fuchs and Gillette on the ground that the disclosed thicknesses of the starting materials in Gillette disclose the claimed thickness ratio. As stated in the preceding paragraph, the pressure, temperature and time duration of the embossing step must be known and the thicknesses are measured after the embossing is complete. Gillette is silent on these important factors. Furthermore, Applicant submits that one of ordinary skill in the art would not believe that the pressure, temperature, time duration regime used in making disposable diapers of Gillette would yield the same result when applied to floor covering (see discussion immediately below).

Furthermore, claim 1 has also been amended to recite that “a lateral distance between adjacent depressed areas in at least one direction is from about 1.5 mm to about 10 mm.”

The rationale for adding the three new structural limitations to claim 1, can be found in paragraphs [0047] and [0049] of the present specification. Paragraph [0049] explains that while

the density of the fibrous outer layer should be high, it should also be lower than that of the combined density in the depressed areas. Paragraph [0049] further explains that to create “abrasion resistance”, “durability”, “barrier to dust and bacteria”, “convenient cleaning” and “sanitizing the composite” the density of the fibrous layer should be high and the anchoring of the fibrous outer layer to the adhesive layer should be at small intervals. To achieve high density in the fibrous layer and to anchor at small intervals, the “lateral distance X” should be about 1.5 to 10 mm, and the combination of lateral distance X and the ratio of D/T_f “helps to assure that the textured composite material [of the present invention] has superior resistance to abrasion and deformation even though the fibers in the elevated areas are substantially free of activated adhesive.”

These three added limitations are not disclosed in the Bushnell reference.

This combination of the three added structural limitations renders the composite of claim 1 usable as a floor covering (see Abstract and Summary), and this distinguishes claim 1 from the tire covers disclosed in Fuchs, from the breathable, pliable, soft, comfortable upholstery fabrics disclosed in Bushnell and from the disposable diapers disclosed in Gillette, as well as all of the currently and previously applied prior art references.

Hence, Applicant submits that amended claim 1 is patentable over the cited art.

Independent claim 62, as amended, is patentable over Fuchs. This claim now requires that “the density of the depressed areas is greater than the density of the elevated areas.” Support for this amendment is discussed in connection with claim 1 above. Specifically, FIG. 2 shows that the thickness “Y” of the depressed area is much thinner than the distance of the composite in the elevated area, which includes the thickness “ T_f ” and the thickness of the adhesive.

On the other hand, Fuchs is silent as to the density difference between the elevated areas and the depressed areas. As best seen in FIGS. 2, 4 and 6 of Fuchs, the thicknesses of the elevated areas and of the depressed areas are substantially the same. This strongly indicates that the densities are unchanged between the elevated areas and depressed areas. Hence, claim 62 is patentable over Fuchs.

Claim 62, as amended, is also patentable over Bushnell. This claim has been amended to add that “the fibrous outer layer comprises thermoplastic fibers located adjacent to the adhesive layer.” Support for this amendment can be found in paragraphs [0055] and [0056], and in all the examples in the specification. Since the present specification discusses homogenous outer layers

that comprise thermoplastic fibers, these thermoplastic fibers are necessarily present adjacent to the adhesive layer.

On the other hand, Bushnell clearly states that fibrous outer layer 11 is a plated fabric knitted so that the top portion 15 is thermoplastic and the bottom portion 16, which faces the adhesive layer 13, is non-thermoplastic. (See Abstract; col. 1, lines 60-68; col. 2, lines 1-13; col. 3, lines 1-21). Bushnell is careful in stating that the total thermoplastic fiber must be greater than 20% of the total weight, but between 40% and 70%, and that the non-thermoplastic portion 16 faces the adhesive (see FIGS. 3-4). Bushnell clearly teaches away from claim 62. The structure described in Bushnell is different from the composite structure claimed in claim 62.

Hence, claim 62 is patentable over Bushnell.

New independent claim 96 is patentable over Bushnell for substantially the same reason that claim 62 is patentable over Bushnell. Claim 96 also recites “the fibrous outer layer is homogeneous,” which distinguishes over heterogeneous fibrous outer layer of Bushnell. Support for this amendment can be found in paragraphs [0055] and [0056], and in all the examples in the specification. Claim 96 is also patentable over Fuchs because it recites that “wherein the density of the depressed areas is greater than the density of the elevated areas,” similar to claim 62.

New independent claim 97 is patentable over Bushnell and Fuchs for substantially the same reasons as those of claim 62, namely that the fibrous outer layer comprises thermoplastic fibers located adjacent to the adhesive layer, and that the density of the depressed areas is greater than the density of the elevated areas.

New independent claim 98 is patentable over Bushnell and Fuchs for substantially the same reason as those of claim 96, namely that the fibrous outer layer is homogeneous, and same reason as those of claim 62, namely that the density of the depressed areas is greater than the density of the elevated areas.

As discussed above, Applicant has addressed the Examiner’s interpretation of the Gillette reference and has distinguished the present invention from Gillette in combination with the other art of record. However, in order to hasten a successful conclusion of the present prosecution submitted herewith is Applicant’s declaration under 37 C.F.R. 1.131 to establish a date of invention before June 12, 2002, which is the earliest possible effective date of Gillette as a reference.

Rule 1.131(b) requires that (i) the invention be conceived and reduced to practice before

the effective date of the reference, or (ii) that the invention be conceived before the effective date of the reference coupled with due diligence prior of this effective date of the reference to a subsequent reduction to practice or to the filing date of the application.

The declaration establishes date of conception before June 12, 2002, (see Exhibits 1 and 2 to the declaration) and a date of reduction before June 12, 2002 (see Exhibit 3 to the declaration). At least four sets of prototypes shown in Exhibit 3, *i.e.*, Examples 1-4, were made and tested. These examples are the forerunners of some of the examples reported in the above referenced patent application. The results along with a lengthy and detailed explanation of the present invention were sent to Applicant's patent attorney, Mr. Jeffery Lew, on June 12, 2002, which coincidentally is the same as the earliest possible effective date of the Gillette reference. Hence, it can easily be inferred that the prototypes were made and tested before June 12, 2002, *i.e.*, at least one day before, due to the amount of work that was involved in making and testing the prototypes. At a minimum, the evidence shows that the reduction of practice started before June 12, 2002 and completed on or before June 12, 2002. Either way, the requirements of Rule 1.131 are met, and Gillette is removed as a prior art reference in this case.

Again, in order to hasten the completion of the present prosecution and in anticipation of possible rejection of the independent claims on an obviousness ground, Applicant submits herewith objective evidence showing the non-obviousness of the present invention. Applicant hereby submits a declaration by Dr. Davis Lee, who has worked in the fields of carpeting and floor covering since about 1995. Dr. Lee had evaluated early samples made in accordance with the present invention and found that the inventive carpet composite samples to be unexpectedly durable and unexpectedly resistant to unraveling when cut. These properties are the effects of the embossing pattern, *i.e.*, with elevated and depressed areas; the embossing pattern has closely spaced embossing to lock the fibers on the face of the composite, rendering the face durable and the edges resistant to unraveling. These properties solve a long felt need in the art and a failure by others, *i.e.*, the unresolved problems associated with the Solenium product, which is a flat floor covering composite. To the best of Applicant's knowledge, this so-called Solenium product is described in WO 99/19557, which is discussed in the Background section of the present invention in paragraph [0008] and which was submitted as reference no. CV in the IDS dated April 21, 2004. Hence, both the durability and the resistance to edge unraveling of the inventive composites are unexpected results and solved a long felt need in the art. All of these

are objective indicator proving the unobviousness of the claims of the present invention. *See Graham v. John Deere Co.*, 383 U.S. 1 (1966), MPEP 1504.3(III), MPEP 2141 (III) and MPEP 716.01(c)(III).

Claims 2-22, 38-61 depend on patentable claim 1 and claims 68-77, 85-95 depend on patentable claim 62, and recite further limitation therefrom. Hence, these dependent claims are presently patentable. Applicant reserves the right to independently support the patentability of these dependent claims when necessary.

Applicant submits that all claims are now in condition for allowance, early notice of which is respectfully requested. Since claims 1 and 62 are presently allowable and remain generic to withdrawn claims 23-37 and 78-84, consideration of the withdrawn claims is earnestly requested.

Fees of \$375 for seven (7) additional claims (including 2 independent claims over the allotted three) are due in connection with the filing of this response. Also, \$395 is due for the RCE filed herewith. If other fees are necessary, please charge the additional fees to Deposit Account No. 50-1980. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully Submitted,

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Dr. Davis Lee's Declaration with exhibit 1
Mr. Dimitri Zafiroglu's Declaration with exhibits 1-3.